

CISPLATIN FLUOROURACIL (CF80 pre op)

INDICATION (ICD10) C15

1. Pre-operative chemotherapy for squamous cell cancer of the oesophagus who are unable to swallow (unlicensed). PS 0, 1, 2

REGIMEN

Day 1 Prehydration
 CISPLATIN 80mg/m²* in 1000ml sodium chloride 0.9% IV infusion over 2 hours
 Posthydration
 FLUOROURACIL 4000mg/m² over 96 hours via an infusor

*Cisplatin dose may be decreased to 60mg/m²

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for 2 cycles

ANTI-EMETICS

Highly emetogenic day 1
 Low emetogenic risk days 2, 3 and 4

CONCURRENT MEDICATION REQUIRED

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|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cisplatin | Ensure adequate pre and post hydration. If urine output is <100ml/hour or if patient gains >2kg in weight during IV administration post cisplatin give 20-40mg furosemide PO/IV. |
| Fluorouracil | Mouth and bowel support eg Loperamide, benzydamine mouthwash |

EXTRAVASATION AND TYPE OF LINE / FILTERS

Cisplatin – exfoliant
 Fluorouracil - inflammitant

Central line

INVESTIGATIONS

Blood results required before SACT administration
 FBC, U&E and LFTs every cycle
 Neutrophils x 10⁹/L ≥1.5
 Platelets x 10⁹/L ≥100
 Ideally EDTA GFR should be used
 Creatinine clearance (GFR) calculated, at the Consultants discretion
 Serum creatinine
 DPYD (dihydropyrimidine dehydrogenase) test
 Baseline weight and every cycle

MAIN TOXICITIES AND ADVERSE REACTIONS

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| Cisplatin | Nephrotoxicity – ensure adequate pre and post hydration is prescribed. Ototoxicity – assess patient for tinnitus or hearing abnormalities. |
| Fluorouracil | Palmar plantar (handfoot syndrome) causing red palms and soles – treat with pyridoxine 50mg tds Diarrhoea – treat with loperamide or codeine Cardiotoxicity – monitor cardiac function (consider ECG at baseline). Special attention is advisable in treating patients with a history of heart disease, arrhythmias or angina pectoris or those who develop chest pain during treatment with fluorouracil. Stomatitis |

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS

(not exhaustive list check SPC/BNF/Stockleys)

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| Cisplatin | Aminoglycosides increased risk of nephrotoxicity and ototoxicity. Renal function should be well monitored and audiometric tests as required. Cisplatin can cause a decrease in phenytoin serum levels. This may lead to reappearance of seizures and may require an increase of phenytoin dosages. |
| Fluorouracil | Cimetidine slightly increases exposure to fluorouracil Metronidazole increased toxicity Phenytoin concentration increased Warfarin |

DOSE MODIFICATIONS

Haematological

If neutrophils $<1.5 \times 10^9/L$ and/or the platelet count $<100 \times 10^9/L$ delay the second course by one week, recheck blood count.

Then if satisfactory ($>1.5 \times 10^9/L$ and $>100 \times 10^9/L$) give 75% dose cisplatin and fluorouracil

If not satisfactory delay by a further week and recheck blood count, if satisfactory ($>1.5 \times 10^9/L$ and $>100 \times 10^9/L$) then give 50% dose cisplatin and fluorouracil.

If still unsatisfactory after 2 week delay chemotherapy should be discontinued.

Non-haematological

Cisplatin

If patient complains of tinnitus, tingling of fingers and/or toes, discuss with SpR or Consultant before administration.

Hepatic impairment

Cisplatin

No need for dose adjustment

Fluorouracil

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Significantly impaired hepatic function eg bilirubin $>50 \mu\text{mol/L}$ may be a sign of disease progression and require cessation of, or change in, treatment. Always discuss deteriorating liver function with consultant. | |
| If hepatic function is impaired, the recommended dose can be reduced to give 50% to 70% dose, but no need for dose adjustment is expected in mild and moderate (without renal impairment). | |
| Bilirubin $>85 \mu\text{mol/L}$ | not recommended |

Renal impairment

Cisplatin

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|------------------|----------------------------------------------------------------------------|
| CrCl >60ml/min | give 100% dose |
| CrCl 50-59ml/min | give 75% dose |
| CrCl 40-49ml/min | give 50% dose (curative intent) not recommended (palliative intent) |
| CrCl <40ml/min | not recommended or switch to an appropriate oxaliplatin containing regimen |

Fluorouracil

If renal function is impaired, the recommended dose can be reduced to give 50% to 70% dose, but no need for dose adjustment is expected.

REFERENCES

1. Lancet 2002. May 18; 359 (9319): 1727-33